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Behind Migrant and Non-Migrant Worktime Inequality in Europe: Institutional and Cultural Factors Explaining Differences

Renate Ortlieb and Julian Winterheller

Abstract

Migrants often work longer hours than their non-migrant counterparts. In this article, we examine reasons behind this inequality, arguing that institutional working time configurations at the country level have impact on worktime inequality. Our cross-country comparative study uses data from the European Labour Force Survey. We focus on France, Sweden, Austria and the UK as archetypal examples of working time configurations and breadwinner models in Europe. Our findings indicate that institutional and cultural factors play a role in working hour differences between migrants and non-migrants. We conclude that more centralized worktime regulation and bargaining foster equality, and we suggest several avenues for future research.

1. Introduction

While the share of foreign-born citizens living in the member states of the European Union has been increasing in the last decades, research consistently shows that migrants fare worse in the labour market than non-migrants. The reasons behind these inequalities have become a burgeoning area of inquiry for researchers, who typically focus on labour market outcomes such as employment status (Cangiano 2012; Dustmann and Frattini 2013; Fleischmann and Dronkers 2010; Guzi *et al.* 2015; Kogan 2006; Pichler 2011; Reyneri and Fullin 2011), income (Adsera and Chiswick 2007), occupational attainment (Pichler 2011; Reyneri and Fullin 2011), and over-/underqualification (Landesmann *et al.* 2015; Nieto *et al.* 2015). In contrast, neglected topics in this research field are working times and the inequality between migrants and non-migrants in terms of weekly working hours.

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This article analyses working hours, because these are an important labour market outcome, as highlighted in major scholarly and political debates. First, working hours are *institutionally* important, because they are essential features of employment relations and thus, one of the key subjects of labour market institutions such as laws and collective agreements between employers and employees (Berg *et al.* 2014; Eurofound 2016). Second, working hours are *economically* important, because they are directly related to the earnings of hourly paid workers and sometimes they result in overtime pay. In addition, they affect future earnings and promotions (Bell and Freeman 2001). Third, they are *socially* important, because they correlate with leisure and family time. Social importance also arises from the fact that possible differences in working hours across sociodemographic groups signal so-called categorical inequality in the labour market (McGovern 2012; Tilly 1998).

Despite the importance of working hours, differences in working hours between migrants and non-migrants is an under-researched topic. Previous scholarly work found marked differences, for instance between migrants from Mexico working in the United States (Blau and Kahn 2007; Lin 2011; Lozano and Sorensen 2015) or Poles in Denmark (Arnholtz and Hansen 2013) and their non-migrant counterparts in these countries. These studies also suggest that a country's institutional context plays a role in working hour differences. However, though cross-country comparisons are the best way to examine the impact of institutions (Berg *et al.* 2014; Guzi *et al.* 2015; Reitz 2002), there is no cross-country comparative research on working hour differences between migrants and non-migrants to date.

In this article, we address this research gap. Adopting an institutionalist perspective and a comparative research design, we aim at describing and explaining working hour differences between migrants and non-migrants across countries in Europe. To theorize on the variation in working hour differences across countries, we apply the framework of working time configurations introduced by Berg *et al.* (2014). Further, we take gender differences into account, as women and men show different patterns of working hours — also known as 'breadwinner models' — among countries (Anxo *et al.* 2013; Blau and Kahn 2015). We concentrate on four countries that resemble archetypes of national working time configurations and breadwinner models, namely France, Sweden, Austria and the UK.

We use data from the European Labour Force Survey (EU-LFS) for the years 2005–2016. The EU-LFS is a unique data source especially well suited for our research purposes. We find that the hours individuals work per week differ considerably between migrants and non-migrants as well as across countries, suggesting that different types of working time configurations are associated with varying degrees of inequality. Further, we identify different patterns for women and men, indicating the relevance of breadwinner models.

Our contribution to the literature is threefold. First, we contribute to the employment relations literature by cross-country comparative research highlighting the link between labour market institutions and inequality. Second, we add to the growing research field of working time comparisons

across countries (e.g. Anxo *et al.* 2013; Burger 2018; Eurofound 2016; Frase and Gornick 2013; Landivar 2015; Lott 2015) by extending the focus to migrants. Third, we advance the literature on labour market inequality between migrants and non-migrants by shedding light on the important dimension of working hours. We also advance this literature by pointing out the significance of gendered patterns.

The remainder of this article is structured as follows. In Section 2, we provide an overview of previous research on working hour differences between migrants and non-migrants in order to identify the factors that account for these differences and to critically assess existing theoretical and methodological approaches. We then turn to institutionalist perspectives in Section 3 and introduce the framework of working time configurations. In Section 4, we give an overview of previous research on gendered patterns of working hour differences and the breadwinner model framework. In Section 5 on methodology, we characterize the four study countries along the theoretical frameworks, before we describe our data und measures. We present our findings in Section 6 and discuss their implications in Section 7.

2. Working hours of migrants vis-à-vis non-migrants

The topic of working hour differences between migrants and non-migrants is situated within the broader literature on the labour market outcomes of migrants. Hallmarks in this broader literature are Chiswick (1978) and Borjas (1985) who studied adaptation processes of immigrants in the United States. Research in this tradition found that migrants are more often unemployed than non-migrants, they earn lower wages, they use their vocational skills to a lesser extent and they are less often promoted (Adsera and Chiswick 2007; Dustmann and Frattini 2013; Fleischmann and Dronkers 2010; Guzi *et al.* 2015; Landesmann *et al.* 2015; Melzer *et al.* 2018; Nieto *et al.* 2015; Pichler 2011; Reyneri and Fullin 2011; Tomaskovic-Devey *et al.* 2015). Catching-up with their native counterparts takes them around one or two decades (Adsera and Ferrer 2016; Blau and Kahn 2007; Borjas 2015; Duleep and Dowhan 2002). Reasons for the poorer labour market outcomes of migrants include the non-recognition of their formal educational attainments and vocational skills obtained in foreign countries, lack of English proficiency, disadvantageous self-selection through ethnic networks and ethnic discrimination by employers.

Although this literature provides a fairly consistent picture of the nature of differences in labour market outcomes between migrants and non-migrants, it suffers from a lack of theoretical debates. Moreover, previous research mainly concentrates on single countries and a few geographic regions in northern America and western Europe. In contrast, cross-country comparative research is scarce. One rare example is a study by Guzi *et al.* (2015) who examine gaps in labour market outcomes of migrants and non-migrants in 19 European countries. Applying the varieties of capitalism framework proposed by Hall

and Soskice (2001) and based on data from the EU-LFS, the study shows that gaps in outcomes such as employment status, working in a low-skill job and temporary employment vary across country clusters. Overall, the findings suggest that institutional characteristics of the considered countries matter, including quality of employment relations in terms of union density and collective bargaining coverage.

Among the dimensions of migrants' labour market outcomes, a few prior studies addressed working hours. In an early study, Blau and Kahn (2007), based on data from the Annual Demographic Supplement (ADS) of the Current Population Survey (CPS), show that annual working hours of migrants from Mexico in the United States converge with those of U.S.-born non-Hispanic Whites over time. Interestingly, this study reveals considerable differences in working hour profiles between migrant women and men. Although, upon arrival, Mexican men work more hours per year than their non-Hispanic white U.S.-born counterparts and the number of annual hours decreases over time, for Mexican women this profile is reversed, with less hours upon arrival and an increasing number of hours over time. (We will expand on these differences in Section 4.)

A study by Lozano and Sorensen (2015) also concentrates on migrants from Mexico in the United States. The analyses based on data from the CPS ADS (the same data base as used by Blau and Kahn 2007) and the CPS Outgoing Rotation Groups (ORG) partly confirm the findings of Blau and Kahn (2007). Specifically, Lozano and Sorensen (2015) also identify assimilation patterns of migrants. However, the ADS data suggest quicker assimilation than the ORG data. Moreover, different from Blau and Kahn (2007), Lozano and Sorensen (2015) found that Mexican men, upon arrival, work less hours per week than U.S.-born men, and the number of hours increases over time. These contradictory findings may be explained by the different composition of the two data sources (in the ADS data, very recent immigrants are under-represented), measures used (annual vs weekly working hours) and slightly different time periods considered in the two studies (1994–2003 vs 1994–2006). Lozano and Sorensen (2015) also found that working hours differ across arrival cohorts, with earlier cohorts showing larger differences from native-born U.S. workers than later cohorts.

In another study based on CPS ORG data for the United States, Lozano (2010) shows that migrant men have a lower probability than non-migrants to work long hours, measured as working 50 or more hours per week. The findings also suggest that the occupation is an important correlate of differences in the probability of working long hours. Specifically, highly skilled, salary paid migrants working in occupations with high wage dispersion and large wage differentials between migrants and non-migrants are less likely than their native-born counterparts to work long hours. The author attributes this phenomenon to the impact of working hours on promotions and future earnings. Working longer hours may be a strategy in the competition for more prestigious positions and higher wages that is more effective for U.S.-born workers than for migrants.

Competition for jobs is also a rationale offered by Lin (2011) in his analysis of working hour differences between low-skilled men from Mexico in the United States and native-born workers. The author assumes that in general, workers were interested in working long hours. He argues that these immigrants are less likely to obtain a job with longer hours than U.S.-born workers because of their lesser human capital (including English proficiency), their concentration in certain niches of the labour market, their overall weaker bargaining position and experienced ethnic discrimination by employers. The analyses based on monthly data from the CPS lend support to this reasoning.

Like in the other work presented in this literature review, Lin (2011) bases his line of reasoning on plausibility and empirical evidence from previous studies rather than on a sound theoretical model. Different from that, Kahanec and Shields (2013) offer an analytical model to explain differences in the labour supply by migrants. Focusing on differences between temporary and permanent migrants and drawing on the household production model suggested by Becker (1965), these authors argue that those individuals who expect a permanent stay in the destination country will invest in human capital specific to the destination, and thus work fewer hours than those individuals who plan to return to their countries of origin soon. Using longitudinal data from the German Socio-Economic Panel (SOEP), they find that temporary migrants work indeed more hours per month than permanent stayers. However, this difference is statistically significant only for men but not for women, confirming other research indicating that working time patterns of women and men differ.

Whereas the study by Kahanec and Shields (2013) does not compare migrants' working hours to those of non-migrants, Arnholtz and Hansen (2013) to our knowledge is the only study about these differences in Europe. Focusing on Polish migrants working in Denmark and based on survey data, the study found greater variability in working hours among migrants. Compared to native-born Danish workers, larger shares in Polish migrants worked either very few or very long hours. The study findings suggest that occupations and the existence of collective agreements at the sectoral level play an important role in these differences. However, as the authors present only descriptive statistics, it is difficult to identify other possible reasons.

Summing up, this literature review shows that working hours of migrants differ from those of non-migrants. The size of this difference depends on various factors such as gender, occupation, the time migrants have been spending in the destination country and expected length of stay in the destination country. With the exception of Arnholtz and Hansen (2013), none of the reviewed studies took account of labour market institutions. Existing theories focus on specific context such as women migrating with their families or differences between temporary and permanent migrants. Nevertheless, comprehensive theoretical models explaining working hour differences between migrants and non-migrants are missing. With regard to methodology, previous research used varying datasets and measures, but there is no consensus about which data and measures are appropriate

for what kind of research questions. With regard to countries, existing evidence was generated in single-countries, whereas there are no cross-country comparisons. Moreover, a major part of previous research focuses on the United States. To our knowledge, the studies by Kahanec and Shields (2013) as well as Arnholtz and Hansen (2013) are the only ones focusing on working hours of migrants in Europe — however, these studies either do not provide insight into differences between migrants and non-migrants (Kahanec and Shields 2013), or they focus on a very specific geographical setting (Arnholtz and Hansen 2013).

Our study seeks to broaden this view in Europe. We examine working hour differences between migrants and non-migrants in more detail, thereby taking account of a number of factors that previously have been found to be associated with these differences. Further, we compare these differences across countries, because we are interested in the (macro-)institutional context of working time. We present the framework that we use for these comparisons in the next section.

3. The framework of working time configurations

Berg *et al.* (2014) proposed a typology to analyse working time practices across countries. Drawing on institutionalist and power resource reasoning, the authors argue that working time practices reflect the interests of employers and employees, whereby a bundle of institutions acts as a filter of these interests. The way in which labour market actors establish, sustain and alter working time practices through such institutions differs across countries and impacts on labour market outcomes of individuals, thereby also contributing to inequality in the labour market. This approach differs from neo-classical perspectives that conceptualize working hours as labour supply, freely chosen by workers according to their preferences. In contrast, Berg *et al.* (2014) identify the following three ideal types of national working time configurations: mandated, negotiated and unilateral configurations.

First, a *mandated working time configuration* is characterized by the dominance of the state in setting a working hour standard by national legislation. Trade unions, employers and employees have little influence on the working hours. Within this configuration, the workweeks of employees are homogeneous in their length throughout the country and across industries. Berg *et al.* (2014) use the example of France to describe this configuration. Some eastern European countries such as Hungary and Poland are also regarded as having a mandated working time configuration (Eurofound 2016).

Second, within a *negotiated working time configuration*, such as in Sweden, worker representatives and employers' associations negotiate working hour standards at the sectoral or company level. Thus, working hours are similar within industries but vary between industries. As a consequence, the working hours are more heterogeneous than in mandated configurations. Further

examples of the negotiated working time configuration include Germany, Austria and the Nordic countries (Berg *et al.* 2014; Eurofound 2016).

Third, a *unilateral working time configuration* means that employers and workers individually negotiate about working hours. Although Berg *et al.* (2014) use the example of the United States to illustrate unilateral configurations, the UK is the only country with this configuration in Europe (Berg *et al. 2*014; Eurofound 2016). Because regulations by the state or collective bodies are weak or absent, working hours depend on the bargaining power of workers. As a consequence, the length of working hours varies considerably across workers groups (Berg *et al.* 2014; Eurofound 2016).

Berg *et al.* (2014) acknowledge that the majority of countries in Europe had mixed types of working time configurations. Yet, the authors also maintain that studying ideal types as showcases increases our understanding of the nature of varying working time practices and their outcomes. We follow their recommendation and use this framework to analyse working hour differentials in four selected countries that resemble the three ideal-typed working time configurations. These countries, which we describe in more detail in Section 5, are France (mandated working-time configuration), Sweden and Austria (negotiated configuration) and the UK (unilateral configuration).

We prefer the framework of working time configurations proposed by Berg *et al.* (2014) over other frameworks often used in studies that compare labour market outcomes of migrants across countries in Europe, such as welfare-state regimes (Esping-Anderson 1990; adopted, for instance, by Fleischmann and Dronkers 2010; Kogan 2006; Pichler 2011) and varieties of capitalism (Hall and Soskice 2001; adopted, for instance, by Guzi *et al.* 2015). Although these frameworks suggest categorizations of country clusters that largely overlap with working time configurations, they refer to a broader set of institutions and do not explicitly address working time patterns. In contrast, bargaining processes over working hours gain centre stage in Berg *et al.*'s (2014) framework. It offers a theoretical rationale based on power that helps us to theorize on working hour differences. Further, the explanative power of this framework received empirical support in the comprehensive cross-country comparative studies by Burger (2018) and Eurofound (2016).

Based on this framework and the existing literature, we maintain that differences in the number of working hours between migrants and non-migrants within one country result from varying preferences of individuals and employers as well as workers' bargaining power. With regard to working time configurations, we expect the following relationships. All other things being equal, in a *mandated configuration*, where the state sets the working hours through national legislation, we expect equal working hours of migrants and non-migrants. Although the state may consider preferences of workers and employers as well as workers' bargaining power in the process of setting working hours, these are not the main drivers. That is, in a mandated configuration, neither individual characteristics of workers — including those that differ between migrants and non-migrants such as labour market outsider/insider status — nor interests of employers — including a 'taste for

discrimination' against migrants in the sense of Becker (1971) — shape the actual working hours.

Similarly, in a *negotiated configuration*, where collective bodies negotiate working hour arrangements at the sectoral or company level, we expect equal working hours between migrants and non-migrants, because individual preferences are less considered in these negotiation processes and migrants' possibly less bargaining power can be compensated by stronger collective actors.

In contrast, in a *unilateral configuration*, where employers and employees negotiate working hours at the individual level, we expect significant differences between migrants and non-migrants, because migrants have less bargaining power (again, all other things being equal).

At this point, a blind spot in our theoretical reasoning becomes apparent. We argue that migrants have less bargaining power than non-migrants but we theorize neither about negotiation processes nor about preferences of employers and workers. We have good reason to assume that preferences vary between and within the groups of employers and workers, both migrants and non-migrants (Bevelander and Groeneveld 2012; Burgoon and Raess 2011; Frase and Gornick 2013; Reynolds and Aletraris 2010). However, our data base does not allow us to examine how such variation translates into concrete negotiation outcomes.

Another drawback of Berg *et al.*'s (2014) framework of working time configurations relates to the level of analysis. By focusing on the country level it neglects variation within countries, for instance across sectors (Berg *et al.* 2014; Eurofound 2016). Theorizing about sectoral differences is beyond the scope of our study, yet we will take account of these differences in our data analysis by including industry variables in the models.

Overall, to explain working hour differences between migrants and non-migrants across countries that are archetypes of distinctive working time configurations we apply *ceteris paribus* reasoning. This implies that we do not go into the details of a number of correlates of these working hour differences. However, since gender aspects play a particularly important role in working time patterns we turn to this topic in the next section.

4. Working hour differences between women and men

The existing literature indicates that analyses of working hours must take account of differences in the working time patterns between women and men (Adams and Deakin 2014; Landivar 2015; Lott 2015; Rubery *et al.* 1998). With respect to migrants, the already mentioned study by Blau and Kahn (2007) found differences not only in the number of hours worked but also in the processes of convergence over time with the working hours of non-migrants. These findings contradict the well-known family investment model proposed by Baker and Benjamin (1997) that offers a theoretical rationale for gendered differences. The model suggests that migrant wives tend to work longer hours

in the early years in the destination country in order to earn the family income and to compensate for the less working hours of their husbands who are more likely to invest in local human capital rather than in longer working hours. Over the years, husbands increasingly work longer hours, enabling wives to work less. In contrast, Blau and Kahn (2007) found migrant women working fewer hours than men.

Similarly, a more recent study by the same authors (Blau and Kahn 2015), based on data from the New Immigrant Survey (NIS) in the United States, shows that migrant women work less hours per year than migrant men. The country of origin and work experience before migration are associated with working hours, as well, suggesting that cultural norms about work in a worker's country of origin continue to have an influence on the working hours in the destination country (also see Blau *et al.* 2011). Comparing migrant women from different countries in the United States with native-born U.S. women, Lopez and Lozano (2009) found fewer weekly working hours for migrant women. In contrast, in a survey study in the Netherlands, Bevelander and Groeneveld (2012) found this relationship to be reversed. Migrant women report longer workweeks than their non-migrant counterparts. The authors explain this finding as reflecting cultural differences between migrant and non-migrant women in the Netherlands, as the latter typically have strong preferences for working part-time.

These contradictory findings bring us to the role of institutions and cultural norms in gendered patterns of working hour differences between migrants and non-migrants. Although generally women work fewer hours than men, this difference varies considerably among countries (e.g. Anxo *et al.* 2007, 2013; Landivar 2015; Rubery *et al.*1998). This variation reflects different breadwinner models, that is, institutional and cultural characteristics concerning the division of paid work and unpaid homework between women and men in family households (e.g. Anxo *et al.* 2013; Mutari and Figart 2001; Warren 2007). Using data from seven European countries, Anxo *et al.* (2013) identified the following three breadwinner models. First is the *strong male breadwinner model,* such as in the UK, where (married) women are discouraged from participating in the labour market. After marriage, women frequently exit the labour market or work part-time. Thus, working hour differences between women and men are large. Second, in countries with a *moderate male breadwinner model,* labour force participation of women is promoted, for example through extensive childcare provision. These countries, such as France, are characterized by a high labour force participation rate among women, with the majority working in long part-time or full-time jobs. However, significant working hour gaps exist in these countries, too. Third, in countries with a *dual breadwinner model,* institutions and culture linked to work and family issues strongly foster women's participation in the labour market. In such countries, exemplified by Sweden, working hour differences between women and men are very small.

Linking these different breadwinner models with previous research on working hours of migrants, we expect gender differences with respect to

working hour differences between migrant and non-migrants, in particular in countries with a strong or moderate male breadwinner model. Although women in general work fewer hours than men in these countries, migrant women are likely to work longer hours than their non-migrant counterparts, because their behaviour is to a lesser extent affected by cultural norms prevailing in the destination country and economic necessity forces migrant women to work longer hours.

5. Methodology

Study Countries

To analyse how working time configurations and breadwinner models impact on worktime inequality between migrants and non-migrants, we selected study countries in such a way that they covered all archetypes of working time configurations and breadwinner models, respectively. Furthermore, we had to consider data availability in the EU-LFS, which led us to the selection of four countries, namely France, Sweden, Austria and the UK. Table 1 shows the working time configurations and breadwinner models in the four countries, along with short summaries of standard working time and overtime regulations.

As highlighted in Table 1 and already mentioned (also see Anxo *et al.* 2013; Berg *et al.* 2014; Eurofound 2016, 2019), France represents a mandated working time configuration, along with a moderate breadwinner model. A special feature of working times in France is that the state defines both, a comparatively short standard workweek of 35 hours and a comparatively low limit to overtime of 220 hours per year. In contrast, in Sweden and Austria, both of which represent negotiated working time configurations, collective agreements refer to standard workweeks of 40 hours, and longer overtime is allowed than in France. Sweden and Austria differ with regard to breadwinner models, with Sweden representing a dual and Austria a strong male breadwinner model. Finally, the UK represents a unilateral working time configuration with standard workweeks and overtime on a discretionary basis of employers and workers, along with a strong male breadwinner model.

Data

Our analyses draw on data from the EU-LFS. Conducted by the national statistical offices and co-ordinated by Eurostat, the EU-LFS is the largest survey on employment-related topics in Europe. In a trend design, that is, a series of cross sections in different time periods and of different units, it randomly samples private households and collects data from individuals aged 15 years and older (for further details, see Eurostat 2019a). This data source is well suited for our analyses for several reasons. First, it enables comparisons across countries, because the questionnaires and the data editing are harmonized. Second, it provides information about weekly working

TABLE 1
Working Time Configurations (Following Berg *et al.* 2014; Eurofound 2016), Breadwinner Models (Following Anxo *et al.* 2013) and Key Working Time Regulations (Eurofound 2019) in the Four Study Countries

France	*Sweden*	*Austria*	*UK*
Working time configuration			
Adjusted mandated configuration; working hours mainly regulated through state laws	Negotiated configuration; working hours mainly regulated in collective agreements at sectoral level	Negotiated configuration; working hours mainly regulated in collective agreements at sectoral level	Unilateral configuration; working hours mainly negotiated between employers and individual employees
Breadwinner model			
Moderate male breadwinner model	Dual breadwinner model	Strong male breadwinner model	Strong male breadwinner model
Standard working hours and overtime regulation			
Working hours exceeding the statutory standard working time of 35 hours per week up to a maximum of 44 hours per week are defined as overtime; overtime must not exceed 220 hours per year; overtime pay regulated in collective agreements	Working hours exceeding the statutory standard working time of 40 hours per week up to a maximum of 48 hours per week on average in a four-month period are defined as overtime; overtime must not exceed on average 50 hours per month and 200 hours per year (350 hours if special reasons exist); overtime pay or time off in lieu by (collective) agreement	Working hours exceeding the statutory standard working time of 8 hours per day (or 40 hours per week) up to a maximum of 10 total working hours per day (or 50 hours per week) are defined as overtime; overtime must not exceed 5 hours per week plus an additional 60 hours per year. Pay or time off in lieu is increased by 50% statutorily	Working hours exceeding the individually agreed normal working hours (employment contract) up to a maximum of 48 hours per week are defined as overtime; individuals can opt out and agree to work beyond this statutory limit; overtime pay rate or time off in lieu by (individual) agreement

Note: Working time regulations refer to the years 2005–2016. Further evidence on breadwinner models also provide this study's Figure 1 and Tables A1 and A2.

hours at the level of the individual worker. Third, it provides background information on migration, such as the individuals' countries of origin and the number of years they have been residing in the destination country since migration.

However, some limitations of the EU-LFS data have to be acknowledged. Due to the specificities of the sampling process, several migrant groups are under-sampled, including recently arrived migrants, those living in collective households and undocumented migrants (Eurostat 2017a); as a result, statistical effects in our analyses may be underestimated for these groups. Furthermore, in Sweden and the UK, where participation in the EU-LFS is

voluntary, the response rate for some migrants was lower than for the total population on account of language difficulties and/or fears that their responses might affect their authorization to stay in the country (Eurostat 2017b).

We use data for the four study countries — France, Sweden, Austria and the UK — from the period 2005 to 2016. We included in the analyses all individuals in dependent employment aged 20–64 years who indicated that they work at least one hour per week. We categorize those respondents who were born in a country other than their current country of residence as migrants. Non-migrants are all other respondents, that is, those living in the country where they had been born.

Our total sample comprises 259,390 respondents in France (thereof 28,548 migrants), 46,484 respondents in Sweden (thereof 7,063 migrants), 39,109 respondents in Austria (thereof 6812 migrants) and 277,441 respondents in the UK (thereof 39,721 migrants).

Measures

Our measure of an individual's *weekly working hours* is the sum of hours worked in the main job and those hours possibly worked in a second job. It also includes overtime, both paid and unpaid. The EU-LFS questionnaire asks about weekly hours usually worked in the main job and those actually worked in a reference week (i.e. usually one calendar week before the survey interview, sometimes longer ago). We decided to use the usual hours variable because it reflects long-term trends better than the reference week variable. However, information on usual hours is only available for the main job. For a second job, there is only information on the reference week (3.3 per cent of the respondents had a second job, with median hours in the four countries and for the seven groups of migrants and non-migrants ranging between 3 and 20 hours, and medians averaging 10 hours). Although summing up the two values that refer to different periods results in limited interpretability of our measure, we preferred this metric over a measure purely based on the reference week variable because we are interested in typical workweeks within a longer time horizon, for which the usual hours variable is more appropriate (Eurostat 2018). Results from analyses using the reference week variable for the main job did not differ substantially from the results using the usual hours variable.

With respect to *country of origin*, we stick to the categories used in the EU-LFS and distinguish between migrants from the EU15 countries ('EU15') — Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the UK — migrants from the 13 new Member States ('NMS13') which joined the EU in 2004, 2007 and 2013 — Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia — and migrants from all other countries ('non-EU').

We measured *years since migration* in two categories distinguishing between those respondents who have been staying in the destination country five

years and shorter vis-à-vis those with longer than five years, striving for comparability with previous studies that also used a five-year span to define arrival cohorts (e.g. Borjas 2015; Lozano 2010; Lozano and Sorensen 2015).

We included the following sociodemographical variables in our analyses. As controls next to *gender,* we considered the level of *education,* because previous research shows that education is positively related to the number of weekly working hours (Bevelander and Groeneveld 2012; Frase and Gornick 2013; Jacobs and Gerson 2004; Lozano and Sorensen 2015). We distinguish between lower secondary education, upper secondary education and tertiary level education according to the ISCED classification. Further, we controlled for *age*, *age-squared* and *marital status* (married or not), as existing literature indicates that working hours vary across the life-cycle (Anxo *et al.* 2007, 2013; Blau and Kahn 2007; Keck and Saraceno 2013; Lozano and Sorensen 2015).

We also controlled for workplace characteristics. Previous research indicates that working hour differences are associated with industry, occupation and firm size, for example on account of different legal regulations, collective agreements and job requirements (Bell and Freeman 2001; Burgoon and Raess 2011; Drago *et al. 2*005; Nicot 2006). Furthermore, migrants may sort themselves differently into these occupations or industries, for example through network effects or because of formal restrictions for certain industries or occupations (Anderson 2010; Lin 2011; Lozano and Sorensen 2015; Ortlieb and Weiss 2019). To take these relations into consideration, in our analyses we included the *industry* in which the respondent works (8 categories; NACE classification), *company size* (a binary variable with a cut-off value of 10 employees, as measured in the EU-LFS), the respondent's *occupation* (10 categories; ISCO classification) and whether the respondent has *supervisory responsibilities* (yes or no).

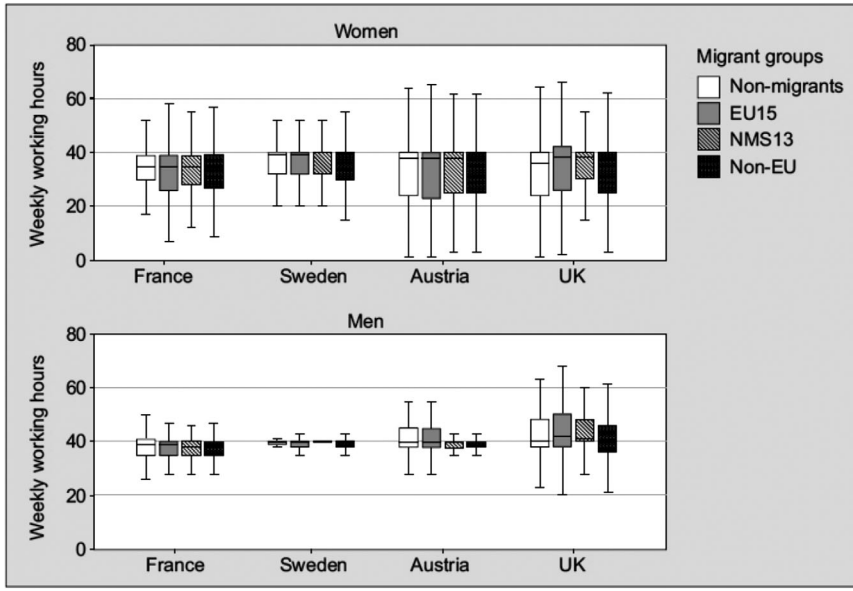
Finally, we included *year* dummies to control for any unobserved aggregate trends, such as the Great Recession. Pooling cross-sectional data across years and using year dummies is a common procedure that also has been applied for instance by Kogan (2006), Blau and Kahn (2007) and Lozano (2010).

6. Findings

In the following paragraphs, we first present descriptive findings in the form of box plots, aimed at visual inspection of differences in weekly working hours between migrants and non-migrants across countries and genders. We then present the estimation results from OLS regression models that included further control variables.

As Figure 1 shows, weekly working hours considerably vary across migrant/non-migrant groups, countries and between women and men. In particular in the UK, working hours differ among migrant groups and between women and men, as suggested by the different median values and the relatively large interquartile ranges. In contrast, these differences are

FIGURE 1
Box Plots of Weekly Working Hours in the Four Study Countries by Gender and Migrant Group.



Note: Middle horizontal lines indicate the median; box lengths indicate the interquartile range (i.e. lower bound = 25th percentile, upper bound = 75th percentile); vertical lines represent maximum values lying less than 1.5 times the box length from either end of the box (i.e. outliers are excluded).
Source: EU-LFS (2005–2016).

particularly small in Sweden. France and Austria are in between the UK and Sweden. For Austria, we identify only small differences in working hours among migrant groups for women, but these differences are more pronounced for men.

In multivariate analyses we considered workers' sociodemographical and workplace characteristics. In line with previous research, we estimated separate regression models for countries and gender because the explaining and control variables may differently affect the weekly working hours of women and men as well as in the four study countries (also see Anxo *et al.* 2007; Keck and Saraceno 2013). Results from OLS regressions with the individual weekly working hours as the dependent variable show that differences in working hours between migrants and non-migrants persist when controlling for sociodemographical and workplace characteristics (see Table 2; we also estimated regression models that included country variables and country–migrant group interaction terms; the results supported our findings from separate model estimations; however, as their interpretation is difficult we concentrate on the findings from separate models).

In line with our expectations, the country showing the biggest working hour differences between migrants and non-migrants is the UK, which is

TABLE 2
Results of OLS Regressions for Women and Men; Dependent Variable: Individuals' Weekly Working Hours

	France		*Sweden*		*Austria*		*UK*	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
Women								
Migrant group (Ref. = Non-migrants)								
EU15 (≤5 years in country)	−1.286*	0.560	−0.548	0.896	0.380	0.845	3.003***	0.379
EU15 (>5 years in country)	0.038	0.161	0.058	0.310	−1.043*	0.517	0.576**	0.208
NMS13 (≤5 years in country)	−0.736	0.892	−1.098	0.963	3.216***	0.791	6.409***	0.256
NMS13 (>5 years in country)	−0.789†	0.439	0.220	0.449	1.963***	0.428	2.767***	0.253
Non-EU (≤5 years in country)	−3.713***	0.392	−2.095***	0.516	1.431†	0.775	3.127***	0.222
Non-EU (>5 years in country)	−0.447***	0.104	0.202	0.198	2.889***	0.301	1.164***	0.118
Men								
Migrant group (Ref. = Non-migrants)								
EU15 (≤5 years in country)	1.537***	0.397	−0.674	0.647	−0.607	0.647	2.208***	0.308
EU15 (>5 years in country)	−0.219	0.140	−0.515†	0.286	−0.090	0.445	1.267***	0.201
NMS13 (≤5 years in country)	−2.637**	0.889	−0.209	0.846	−0.966	0.718	2.469***	0.216
NMS13 (>5 years in country)	−0.406	0.464	−0.275	0.496	−1.002*	0.413	1.444***	0.241
Non-EU (≤5 years in country)	−3.540***	0.279	−1.711***	0.374	−3.014***	0.578	−2.132***	0.170
Non-EU (>5 years in country)	−1.215***	0.084	−0.328†	0.176	−1.602***	0.235	−1.534***	0.102

Note: The models included the following control variables: education, age, age-squared, marital status, industry, company size, occupation, supervisory responsibilities, year. The coefficients for these variables can be found in the Appendix.
Source: EU-LFS (2005–2016).
$^{\dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

characterized by a unilateral working time configuration. All coefficients in the model for the UK are statistically significant, indicating that working hours of both women and men from all country groups differ from those of non-migrants. Migrants typically work longer hours than non-migrants in the UK, with the exception of men from non-EU countries working fewer hours than their native counterparts. The coefficients are larger for those migrants who have been spending five years and less in the UK, indicating that migrants' working hours converge over time with those of non-migrants.

Compared to the UK, differences in working hours between migrants and non-migrants tend to be smaller in France. Although the overall pattern of the coefficients in the model for France is in line with our expectation based on Berg *et al.*'s (2014) framework, to a larger extent than expected there are working hour differences between migrants and non-migrants in this archetypal mandated working time configuration country. Specifically, migrants from non-EU countries work fewer hours than their native counterparts, and men from EU15 countries who have been spending five years or less in France work more hours than any other group. Additional analyses revealed neither industry nor occupation effects. Of the migrants from EU15 or NMS13 countries, working hour patterns differ between women and men.

Turning to the two countries with negotiated working time configurations — Sweden and Austria — the working hour differences between migrants and non-migrants are much smaller or even non-existing. In Sweden, in particular, the only group working different hours than non-migrants are migrants from non-EU countries who have been spending five years or less in Sweden. Interestingly, in this group, the coefficients for women and men are very similar, reflecting the dual breadwinner model in Sweden. A different picture emerges for Austria, suggesting a gendered pattern, with all women from NMS13 countries and those women from non-EU countries who have been longer than five years in the country working longer hours than their non-migrant counterparts and all men from non-EU countries working shorter hours than non-migrant men in Austria.

Overall, the findings lend support to our theoretical reasoning that differences in weekly working hours between migrants and non-migrants across countries can be explained by both, working time configurations and breadwinner models.

7. Discussion

This article aims to examine, from a cross-country comparative perspective, the working hour differences between migrants and non-migrants as one dimension of inequality in the labour market. Our findings have important implications for research on the role of working time configurations in worktime inequality, as well as the role of breadwinner models and the role of a migrant's country of origin. We discuss these implications in the following paragraphs, followed by practical implications and our conclusions.

Working Hours of Migrants and Non-Migrants and the Role of Working Time Configurations

Our findings indicate that working time configurations are linked with worktime inequality. Specifically, a unilateral working time configuration such as in the UK, where employers and workers have the biggest discretionary space in negotiations, leads to marked inequality. In contrast, a mandated working time configuration such as in France or a negotiated configuration such as in Sweden and Austria are linked with greater — though not full — equality. The institutional setting in these configurations is stronger in the sense that the institutions filter interests of employers and workers (Berg *et al.* 2014), thereby balancing varying preferences and unequal bargaining power of migrants and non-migrants. We note differences between these countries, too, which we interpret as mirroring different breadwinner models (also see the next paragraph).

Research on wage-setting in labour markets supports our line of reasoning about the role of working time configurations (Devicienti *et al.* 2018; Friberg *et al.* 2014). This research has shown that more centralized bargaining, for example through collective agreements at the sectoral level, leads to more egalitarian wage distribution, as compared to negotiations between employers and employees. With regard to working hours, Burgoon and Raess (2011) show that collective agreements at the establishment level mediate the impact of globalization indicators on standard weekly working hours in Europe. Similarly, Burger (2018) demonstrates that very long workweeks, with 50 hours and more, are less prevalent in countries with centralized collective bargaining. Finally, our findings resonate with those of Landivar (2015), who found that state regulations stipulating short standard work weeks and less maximum allowable weekly working hours lead to gender equality within couples.

Our study adds to this research on labour market inequality by focusing on working hours and migrants. It is the first country-comparative study in this research area that addresses European countries, and the first one using the framework of working time configurations by Berg *et al.* (2014). This framework proved to be useful in explaining cross-country variation. At the same time, our findings imply that this framework also provides a theoretical rationale for understanding inequality within one country — here — concerning migrants and non-migrants.

However, this insight comes with two caveats which are common in comparative research applying institutionalist perspectives. First, as, for instance, Reitz (2002) emphasizes, comparative immigration research on the one hand benefits from taking account of a larger set of labour market features and related societal institutions, such as education, social welfare and immigration policies. On the other hand, such a comprehensive view increases complexity. In our study, this dilemma is notable, too. Specifically, while our main research focus is on working time configurations in the sense of Berg *et al.* (2014), we cannot fully isolate these from other factors in our empirical analysis. For instance, our finding that men from non-EU countries work

shorter hours than non-migrants in all four study countries, but migrants from EU15 or NMS13 countries work longer hours in the UK (and slightly different from non-migrants in France) suggests that next to national working time configurations, immigration policies distinguishing between EU- and non-EU-citizens play a role in worktime inequality, too. Similarly, national welfare regimes and the transportability of social benefits across national borders affect both labour supply of migrants and their labour market outcomes (Friberg *et al.* 2014; Guzi *et al.* 2018; Kogan 2006). Thus, faced with the complexity dilemma in our study, we see the value of our findings in the fact that we have identified worktime patterns for migrants and non-migrants that are in accordance with Berg *et al.*'s (2014) explanatory framework at a more comprehensive level, thereby also revealing starting points for future research at a more detailed level of analysis.

Second, our data do not allow us to observe *how* a certain number of working hours of an individual or in a company or industry comes into being. Rather, we can only infer from context information in the countries and working hours that institutions matter. Moreover, the framework of working time configurations cannot take account of the full array of institutional dynamics behind working hours. For instance, whereas Berg *et al.*'s (2014) framework focuses on configurations on the national level and cross-country working hour differences, some patterns are similar in certain industries across countries (Eurofound 2016), suggesting that configurations on the industry level play a significant role in the distribution of working hours. Also, institutions at supranational levels may play a role, as, for instance, Lillie and Greer (2007) demonstrate in a study in the European construction sector. Hence, future research delivering a finer-grained picture of working time configurations, including institutions at the international and the industry level, is needed. Such analyses also could shed light on differences in collective bargaining coverage across migrant groups as well as between women and men. For instance, while both Sweden and Austria represent a negotiated working time configuration, with collective bargaining coverage around 90 per cent and higher (Eurofound 2019), more women and migrants may work in jobs to which collective agreements do not apply — and these differences may vary across countries.

Third, although our findings reveal links between working time configurations and working hour differences between migrants and non-migrants that are in line with our theoretical reasoning, there is room for interpretation as to the reasons of these differences. (We mentioned this blind spot of our study already in the section on Berg *et al.*'s (2014) framework.) For instance, the fact that migrant women in the UK work longer hours than non-migrant women can be interpreted as resulting from either different preferences of these women *or* different preferences of their employers *or* different bargaining power of migrants and non-migrants. Disentangling these effects would be an important task of future research in order to open the black box of our *ceteris paribus* assumptions and to arrive at more specific theoretical reasoning.

A fourth limitation of our study relates to the qualitative dimension of working times. We concentrate on the quantitative dimension in terms of weekly working hours but neglect their timing, flexibility, predictability and controllability for workers. Moreover, as working hours can have different meanings to migrants and non-migrants (Avery *et al.* 2010), as well as to women and men (Lott 2015), future research illuminating such qualitative features of working times from a cross-country comparative perspective would provide an important complement to our study.

Gendered Patterns and the Role of Breadwinner Models

A second major finding of our study refers to gendered patterns of working hours and the impact of breadwinner models. A strong male breadwinner model such as in Austria or the UK is associated with working hour differences between migrants and non-migrants for women and men, and to a larger extent for married women. In contrast, in a moderate male breadwinner model such as in France, these differences are less pronounced. Especially in a dual breadwinner model such as in Sweden, these differences are almost non-existing. Previous research revealed differences in working hours between migrant and non-migrant women *or* migrant and non-migrant men *or* migrant women and men. Our findings go beyond existing research, because we are able to compare these four groups with one another. We show that working hours vary both, between women and men as well as among breadwinner models.

Our findings concerning gendered patterns partly confirm previous research. Specifically, our descriptive finding that migrant women work shorter hours than migrant men resembles the findings of Blau and Kahn (2007, 2015) for the United States. Our finding that migrant men (particularly those from non-EU countries) work shorter hours than non-migrant men in all four study countries confirms evidence from Lin (2011) for the United States. And like Bevelander and Groeneveld (2012) for the Netherlands, we find that migrant women work longer hours than their non-migrant counterparts in Austria and the UK, suggesting that migrant women are to a certain extent 'immune' to the breadwinner model in a country. This may be especially the case for women migrating to countries with a strong male breadwinner model, because migrant women are more dependent on income and they can to a lesser extent afford working shorter hours.

On the other hand, we also find migrant women (from non-EU countries) working shorter hours than non-migrant women in France and Sweden, echoing the findings of Lopez and Lozano (2009) and suggesting that also in countries with moderate male or dual breadwinner models migrant women not automatically adjust to the work behaviour of non-migrant women. These findings may serve as starting point for future research on gendered patterns of working hours and differences between migrants and non-migrants in this regard. In particular, the question arises why couples and families residing in the same institutional environment in terms of childcare facilities, parental

leave regulations or educational and tax systems work different hours? And once more, we have to acknowledge that certain social welfare benefits or immigration policies may affect the identified gendered patterns, calling for more research on their relationship with working time configurations. Also, more research on how breadwinner models impact on the labour supply of migrant men is needed, as the existing literature on gendered patterns in working hours concentrates on women but our findings suggest that the breadwinner model prevailing in a country influences men too.

The Role of the Country of Origin

A third major finding of our study refers to the heterogeneity of different migrant groups in terms of country of origin. In particular non-EU migrants differ in working hours from non-migrants, suggesting that, next to immigration policy effects and despite the filtering function of working time configurations, this group has special preferences and/or bargaining power. However, one limitation of our data is that we cannot distinguish between single countries or other country clusters than those categories used in the EU-LFS. Thus, the non-EU category contains countries as different as Switzerland and India or the United States and Morocco. Although lumping together these countries into one category alone can be problematic, studying these categories in different destination countries complicates interpretation of research findings even more. For instance, in the UK, non-EU migrants predominantly come from India and Pakistan, whereas in Austria, Serbs and Turks are the biggest groups (Eurostat 2019b). Similarly, NMS13 countries and EU15 countries have different meanings with regard to the four destination countries in our study, not least because the destination countries adopted different transition regulations for workers from NMS13 countries and thus received different types of workers (Dustmann and Frattini 2013; Kahanec 2012).

Nevertheless, echoing previous research for the United States (Lopez and Lozano 2009), our findings suggest that the country of origin plays an important role in working hours. Hence, a fruitful avenue for future research is the analysis of country of origin effects on working hours in more detail. Also theoretically, such an endeavour is important, because varying cultural, educational and geographical proximity between countries of origin and destination countries may be linked with varying preferences of employers and workers as well as workers' bargaining power.

Practical Implications

We see several practical implications of our study findings. First, because institutional settings at the national level tend to reduce labour market inequality between migrants and non-migrants, policymakers need to be aware of the effects of 'individualizing' working hours when they give companies greater autonomy in processes of deregulation. This insight is especially important in the context of the EU and its aims for a convergence

of the collective bargaining system across Europe and further European integration. Second, social partners and companies — including works councils or other types of employee representatives — too must take account of their policies' impact on inequality between social groups when they use discretionary spaces offered by state regulations on working times. However, as previous research shows, changing working time practices in companies through management interventions is an extremely difficult endeavour (Blagoev *et al.* 2018). Hence, social partners and companies seeking to foster equality must put special effort in such change interventions. Perhaps, measures probed in the field of equal pay, such as making pay distributions transparent, will also be effective in the field of working times.

Conclusion

In conclusion, this cross-country comparative study revealed significant differences in working hours between migrants and non-migrants, between women and men and between migrants from varying countries of origin. The findings suggest that the institutional and cultural features in European countries, manifested in distinct working time configurations and breadwinner models, contribute to these differences. More specifically, more centralized worktime regulation and bargaining foster equality. Therewith, this study highlights the fruitfulness of institutionalist employment relations perspectives and considerably adds to our understanding of working hours and labour market inequality between migrants and non-migrants. At the same time, it identifies many questions concerning detailed features of working time configurations, which should be addressed in future research.

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Appendix

TABLE A1
Results of OLS Regressions for Women; Dependent Variable: Individuals' Weekly Working Hours

	France		*Sweden*		*Austria*		*UK*	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
Migrant group (Ref. = Non-migrants)								
EU15 (≤5 years in country)	−1.286*	0.560	−0.548	0.896	0.380	0.845	3.003***	0.379
EU15 (>5 years in country)	0.038	0.161	0.058	0.310	−1.043*	0.517	0.576**	0.208
NMS13 (≤5 years in country)	−0.736	0.892	−1.098	0.963	3.216***	0.791	6.409***	0.256
NMS13 (>5 years in country)	−0.789†	0.439	0.220	0.449	1.963***	0.428	2.767***	0.253
Non-EU (≤5 years in country)	−3.713***	0.392	−2.095***	0.516	1.431†	0.775	3.127***	0.222
Non-EU (>5 years in country)	−0.447***	0.104	0.202	0.198	2.889***	0.301	1.164***	0.118
Education (Ref. = lower secondary education)								
Upper secondary education	0.551***	0.074	0.203	0.185	−0.727**	0.248	0.412***	0.082
Tertiary education	1.139***	0.092	0.004	0.217	−0.423	0.330	1.290***	0.093
Age	0.019***	0.003	0.063***	0.005	0.019*	0.009	−0.033***	0.003
Age^2	−0.003***	0.000	−0.009***	0.000	0.000	0.001	0.000	0.000
Married (1 = yes)	−0.856***	0.055	−0.833***	0.117	−4.683***	0.174	−3.470***	0.063
Industry (Ref. = Manufacturing; transport; storage)								
Agriculture; mining; electricity; water	−0.900***	0.255	0.165	0.612	0.375	0.769	−0.500†	0.286
Construction	−1.309***	0.231	−0.285	0.559	−2.350***	0.516	−2.531***	0.232
Wholesale; retail	−2.143***	0.109	−2.329***	0.254	−2.563***	0.291	−4.532***	0.126
Accommodation; food	−1.402***	0.167	−1.106**	0.378	1.415***	0.371	−4.455***	0.165
Finance; real estate; consulting	−0.615***	0.105	−0.420	0.233	−1.829***	0.303	−1.617***	0.122
Social security; education; public administration; entertainment	−2.613***	0.093	−0.241	0.211	−1.048***	0.279	−2.916***	0.111
Health; social work	−1.014***	0.098	−1.499***	0.221	−1.488***	0.294	−2.893***	0.116
Small company (≤10 employees)	−1.327***	0.059	−0.984***	0.142	−4.395***	0.176	−3.694***	0.077

(*Continued*)

TABLE A1
Continued

	France		*Sweden*		*Austria*		*UK*	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
Occupation (Ref. = Technicians; associate professionals)								
Armed forces occupations	9.861***	0.480	3.338	2.999	4.119	6.057	2.394†	1.415
Managers	4.949***	0.136	1.587***	0.318	3.774***	0.514	3.725***	0.126
Professionals	1.434***	0.092	0.923***	0.171	2.034***	0.318	2.388***	0.104
Clerical support workers	−0.470***	0.087	−1.458***	0.216	−0.828**	0.254	−1.799***	0.104
Service and sales workers	0.666***	0.090	−2.889***	0.187	−1.935***	0.255	−3.724***	0.101
Skilled agricultural, forestry and fishery workers	−0.560	0.392	−0.330	0.822	1.915†	1.082	−0.129	1.049
Craft and related trades workers	0.242	0.227	0.468	0.561	0.499	0.570	1.481***	0.366
Plant and machine operators assemblers	−0.264	0.166	−0.005	0.382	0.323	0.620	0.833***	0.252
Elementary occupations	−5.133***	0.101	−4.691***	0.285	−5.484***	0.315	−7.306***	0.136
Supervisory responsibilities (1 = yes)	3.162***	0.085	1.551***	0.139	5.572***	0.226	5.438***	0.071
Year (Ref. = 2016)								
2015	−0.180	0.124	−0.016	0.259	−0.014	0.369	0.136	0.138
2014	−0.096	0.125	−0.015	0.259	0.065	0.370	0.086	0.139
2013	−0.208†	0.125	−0.092	0.260	0.550	0.372	−0.217	0.140
2012	−0.050	0.125	−0.153	0.261	0.689†	0.374	−0.306†	0.140
2011	−0.011	0.125	−0.240	0.262	0.740†	0.375	−0.568***	0.140

(*Continued*)

TABLE A1
Continued

	France		Sweden		Austria		UK	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
2010	0.282*	0.125	−0.312	0.264	1.064**	0.377	−0.135	0.141
2009	0.111	0.126	−0.378	0.264	1.130**	0.379	−0.016	0.141
2008	0.241†	0.129	−0.417	0.272	1.565***	0.392	0.283†	0.145
2007	0.063	0.126	−0.491†	0.263	1.691***	0.383	−0.147	0.141
2006	−0.049	0.127	−0.506†	0.265	1.644***	0.385	−0.174	0.141
2005	0.283*	0.128	−0.032	0.268	3.047***	0.389	1.727***	0.144
Constant	36.13***	0.152	38.71***		36.79***		36.43***	0.174
Adjusted-R^2	0.121		0.117		0.171		0.224	
Observations	128,341		23,130		18,757		137,293	

Source: EU-LFS (2005–2016).
$^{\dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

TABLE A2
Results of OLS Regressions for Men; Dependent Variable: Individuals' Weekly Working Hours

	France		*Sweden*		*Austria*		*UK*	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
Migrant group (Ref. = Non-migrants)								
EU15 (≤5 years in country)	1.537***	0.397	−0.674	0.647	−0.607	0.647	2.208***	0.308
EU15 (>5 years in country)	−0.219	0.140	−0.515†	0.286	−0.090	0.445	1.267***	0.201
NMS13 (≤5 years in country)	−2.637**	0.889	−0.209	0.846	−0.966	0.718	2.469***	0.216
NMS13 (>5 years in country)	−0.406	0.464	−0.275	0.496	−1.002*	0.413	1.444***	0.241
Non-EU (≤5 years in country)	−3.540***	0.279	−1.711***	0.374	−3.014***	0.578	−2.132***	0.170
Non-EU (>5 years in country)	−1.215***	0.084	−0.328†	0.176	−1.602***	0.235	−1.534***	0.102
Education (Ref. = lower secondary education)								
Upper secondary education	0.577***	0.058	0.057	0.145	0.187	0.227	0.432***	0.071
Tertiary education	1.652***	0.076	−0.167	0.179	0.785**	0.279	0.214**	0.083
Age	0.009***	0.002	0.032***	0.004	0.000	0.007	−0.021***	0.003
Age^2	−0.005***	0.000	−0.007***	0.000	−0.008***	0.001	−0.009***	0.000
Married (1 = yes)	0.663***	0.049	0.288**	0.107	1.042***	0.150	0.426***	0.060
Industry (Ref. = Manufacturing; transport; storage)								
Agriculture; mining; electricity; water	−0.157	0.122	0.721*	0.292	0.914*	0.382	2.637***	0.145
Construction	0.584***	0.084	0.558**	0.186	0.463*	0.209	0.773***	0.101
Wholesale; retail	0.257***	0.075	−0.133	0.169	−0.391†	0.215	−2.162***	0.088
Accommodation; food	0.065	0.143	−1.031**	0.347	−0.368	0.399	−3.687***	0.145
Finance; real estate; consulting	−0.227**	0.078	−0.295†	0.157	−0.434†	0.237	−0.072	0.085
Social security; education; public administration; entertainment	−2.832***	0.070	0.048	0.164	0.085	0.212	−1.663***	0.085
Health; social work	−1.643***	0.109	−1.432***	0.232	−0.475	0.340	−2.237***	0.122
Small company (≤10 employees)	0.162**	0.056	−0.039	0.124	−2.369***	0.168	−0.822***	0.071

(*Continued*)

TABLE A2
Continued

	France		Sweden		Austria		UK	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
Occupation (Ref. = Technicians; associate professionals)								
Armed forces occupations	8.621***	0.169	1.680*	0.653	1.092	0.844	3.817***	0.366
Managers	5.946***	0.098	1.189***	0.228	3.264***	0.295	2.809***	0.103
Professionals	2.854***	0.078	0.695***	0.162	0.794**	0.257	0.995***	0.097
Clerical support workers	−1.199***	0.103	−1.634***	0.244	−1.268***	0.277	−2.457***	0.127
Service and sales workers	0.312**	0.098	−2.150***	0.198	0.204	0.282	−2.244***	0.115
Skilled agricultural, forestry and fishery workers	−0.509**	0.167	0.801†	0.459	2.949***	0.697	−0.083	0.300
Craft and related trades workers	−0.622***	0.080	0.628***	0.178	−0.473*	0.209	1.560***	0.112
Plant and machine operators assemblers	0.280***	0.082	0.151	0.182	1.427***	0.254	2.383***	0.120
Elementary occupations	−1.645***	0.098	−3.058***	0.254	−1.379***	0.280	−1.197***	0.114
Supervisory responsibilities (1 = yes)	2.766***	0.058	1.326***	0.112	3.090***	0.157	4.054***	0.062
Year (Ref. = 2016)								
2015	0.027	0.106	−0.115	0.226	0.143	0.305	0.182	0.124
2014	−0.046	0.106	−0.089	0.227	0.317	0.307	0.308*	0.124
2013	0.184†	0.107	−0.131	0.227	0.620*	0.307	0.006	0.125
2012	0.496***	0.106	−0.186	0.228	0.894**	0.308	−0.035	0.125
2011	0.661***	0.107	−0.099	0.228	1.022***	0.309	−0.004	0.125

(*Continued*)

TABLE A2
Continued

	France		*Sweden*		*Austria*		*UK*	
	B	*s.e.*	*B*	*s.e.*	*B*	*s.e.*	*B*	*s.e.*
2010	0.666***	0.107	−0.074	0.230	1.169***	0.310	−0.165	0.126
2009	0.714***	0.107	−0.141	0.230	1.317***	0.311	−0.020	0.126
2008	0.790***	0.109	−0.154	0.239	1.815***	0.316	0.546***	0.129
2007	0.742***	0.107	−0.137	0.230	2.189***	0.310	0.356**	0.125
2006	0.624***	0.107	−0.201	0.232	2.169***	0.312	0.251*	0.126
2005	1.360***	0.108	0.253	0.236	3.396***	0.318	2.343***	0.129
Constant	37,32***	0.114	39.58***	0.260	39,94***	0.370	41.46***	0.145
Adjusted-R^2	0.157		0.077		0.102		0.141	
Observations	131,049		23,354		20,352		140,148	

Source: EU-LFS (2005–2016).
$^{\dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.